#8.

Read March 25th 1826

An Essay on Trachitis

by Jacob Lentz

of

Pennsylvania

1825 –

On Croup —

Tracheitis or croup is a disease, which writers define an Inflammation of the larynx and trachea —

It is a disease almost peculiarly incident to children, and is said by some never to affect them beyond the age of ten years, but others say it is sometimes met with in adults.

Croup is an affection which prevails most generally during spring and autumn, very seldom appearing in the months of summer, and is more frequently seen on the margins of water than in other situations.

It has been divided into Idiopathic and Symptomatic —. Idiopathic when it prevails as an original affection, and Symptomatic, when it is the consequence of other diseases, as Rubeola, Catarrh, or Scarlatina &c.

That it is produced by those diseases occasionally we have the assurance of Dr Rush, Dr Hosack and many others -

The latter mentions three cases, that occurred to Cheyne as the consequence of Scarlatina, Secondary small pox, and catarrhal affection -.

Dr Rush remarks "I have seen it accompany as well as succeed the small pox, measles, scarlet fever, and aphthous sore throat. In the late Dr Goulthe, it succeeded acute rheumatism. The late Dr Sayre informed me, that he had seen it occur in a case of Yellow Fever in the year 1798".

It has likewise been distinguished into Spasmodic and Inflammatory croup, but objected to by some, who say it uniformly arises from Inflammation -: It is however the opinion of our worthy Professor Dr Chapman, that when the patient is attacked very suddenly, it is Spasmodic, which continuing for a sufficient length of

time, induces Inflammation: of the validity of this says the Professor, there is no doubt, as we have it instanced remarkably in Colic. This however continues the Dr is a point of no practical importance, whether it is Spasmodic or Inflammatory, no remedy is of such great utility as Venesection, and none more pernicious, than Antispasmodics.

It is said to prevail epidemically and in support of it Dr Caldwell expresses himself in the following terms "although this disease, often, perhaps always, when in a sporadic form, arises from improper exposure, to cold or humidity, and is therefore connected with changes in the weather, it like other diseases does also at times prevail as an epidemic, without any apparent dependence on the sensible qualities of the air.

This appears to have been the case in the neighborhood of Alexandria in Virginia in the year

1799, the period at which General Washington fell a victim to it, and it was certainly the case in Philadelphia, in the winters of 1809-10 when the disease was productive of considerable mortality. On the latter occasion we know from observation, that the weather was regular and fine for the season, yet for several weeks, the croup prevailed with the character of an epidemic.

Whether it prevail at times as an epidemic or not, it is known to be peculiar in some families, in which the disease under consideration is excited during the vicissitudes of the weather by the least application of cold. I am acquainted with several in this situation.

The occurrence of the disease may be attributed very generally to cold, and it more frequently produces the disease, when conjoined with dampness. hence its greater prevalence in damp situations.

through in the mode of attack is various somet-
times commencing in a violent cough at night;
the child awakes in a state of great anxiety
seems for breathing easier, a harsh cough
followed fall, considerable fever and other
febrile symptoms. It is exceedingly uncertain,
varying and severe, and frequently assumes
the exact nature, the most fearful features
in order as it has been said to strangulate the
trachea. At other times the disease commences
more slowly, with a cough and voice more
hoarse than common, assuming somewhat
the appearance of common catarrh, the patient
lingers on for weeks or days or three or four days
and is seen drooping inactive and feeble; the
disease progressing, all these symptoms are aggra-
vated, and finally terminates in a most
distressing dyspnoea.

In the Diagnosis not much difficulty will

[illegible]

[illegible] the disease, and is attended with [illegible] suffering.

The prognosis can scarcely be said to be more difficult when the difficulty of breathing is not at all relieved after the full effect of venæsection and blistering have been obtained, since the patient is in an unfavourable situation; and where there is a raising of the

shoulders, with a thumping at the heart, it is said to be an organic valvular affection; on the contrary when the patient is easily excited it proves, that a sudden, little or no inflammation and no usual alteration of temperature there is every reason to expect a recovery. Croup is generally considered by practitioners a very formidable disease. Fatal in more than one half of the cases that come immediately under my observation. Especially in regard to the cases that occur in the first of the month where the disease is so extraordinarily common; it is my opinion that if prompt remedial measures be resorted to, and before the disease has so far advanced it is as much under the control of medicine as any of the inflammatory diseases.

Relative to the etiology, more to can increase has existed, Cullen defines croup to be an

[illegible]

[illegible]

[illegible]

[illegible] not [illegible]

[illegible]

The two diseases are never confounded [illegible]

which would be the case if they were [illegible] a practical point of view.

In the treatment of a patient with [illegible] we perceive a coincidence [illegible] in the adaptation of the Rationale [illegible] the case of the selection but differing considerably in the application of the various measures which constitute this system.

The practice in this treatment directly on the first place was emetic compared of ii. grains of tartar emetic with five grains of ipecacuanha & the same seven fifteen minutes under the influence of the prescribed, and it produced a violent vomiting lasting the hours. He said

"If an the emetic had no other effect than

[illegible]

[illegible]

[illegible]

[illegible] in [illegible] in [illegible]
in some cases determined can be placed. There
is no doubt in this case [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
are become very severe and more especially until
they have called for many hours, at only increases
suffocation and hastens death; the effect is that
the blood ought to be taken at once from the
arm".

Dr. Hamilton records actually the use of venesection and depends solely upon calomel in its contradiction. He says "In the case of true pneumonitis affection, practitioners hesitated to bleed, with the use of vomits and blisters as auxiliaries; but the result of this practice, was in the severe pneumonitic cases, a very considerable

shock to the child's constitution, and in the majority retards the cure of the disease;
These circumstances rendered it fair to make trial of the practice of giving calomel, first suggested by some American physicians.
Accordingly it was resorted to and in every case (amounting now to above 40) in which it was used, it completely succeeded in curing the disease, and in preventing any shock to the child's constitution, if directed to before the commencement of lividness of the lips, and other mortal symptoms."

This with the warm bath and a proper regulation of diet constitutes the treatment of Dr James Hamilton of Edinburgh, which though emanating from so great authority, is absolutely inadequate to the performance of such remarkable cures in America.

That calomel occasionally may by its very

early exhibition for some cases effect a cessation of the disease I believe, but that it will do it in all cases, I am not prepared to the commence of indications of the fever and other morbid symptoms appears to be sufficient for a release. So the dressing time of bark we are required increase more than Emetics—

Judging from the experience that I have had with the disease, I am compelled to state, as my opinion, that all the remedies, before the Editor mentioned, have made their appearance, four cases out of six will not require the use of the lancet.

Therefore vomiting is the first thing to be done; whether called in the commencement or advanced stage of the disease because then we must adhere to the prominent stage rather than the general stage of the disease; though in no measure do I wish to insinuate that it is a

remedy when attended with so great advantage, or not to resort to other means if relief be not obtained in the course of an hour or two.

It is well known that in many cases more is required than venesection.

Therefore should the consultant not yield to the proper exhibition of cordials, the lancet is loudly called for; blood must be immediately drawn from the arm, and the child placed in the warm bath to remain for fifteen minutes should circumstances permit.

But if local bleeding be expedient recourse should be resorted to and a ligature put round the neck. These favourable occasions resort to venesection and it is recommended to bleed and deliver without.

Many practitioners object to so serious an opinion of these medicines on the ground lest the child's death drawn when reduced to this degree suffer immediately

[illegible]

[illegible] of the

[illegible] the

[illegible] to be true.

"Forming the [illegible] of the [illegible] of [illegible] and especially the blood, in relation to the joints are [illegible] the [illegible] as is distinctly shown by a variety of circumstances.

The patients of these writers receive children from [illegible] to Inflammatory affections. Hence all their diseases partake of this nature in some degree. It follows therefore they receive [illegible] to be bled. My own experience confirmed by that of other practitioners has perfectly satisfied me that bloodletting may be used with as much safety and decided with as much success in the majority of children from these [illegible]. If the [illegible] the loss of blood better at the time, then we should recover sooner from its effects."

in [illegible] [illegible] exciting [illegible], seems to [illegible] arises out of the [illegible] fermentation, but owing to an extreme [illegible] of constitution they cannot bear any vigorous [illegible] - As a natural consequence of this opinion the usual practice in their complaints is [illegible] [illegible], [illegible] [illegible] of that kind which has been facetiously described as observing a strict neutrality between the patient and disease neither deciding for the one nor the other - By [illegible] [illegible] practical observation, I [illegible] [illegible] commenced the [illegible] of [illegible] to [illegible] -

Children I have remarked enjoy an uncommon tenacity of life and strength of constitution. They often survive under circumstances, which would destroy adults. They have been found living at the breasts of their mothers, who had perished by cold. They resist contagion better than adults, and when attacked, more certainly recover from not only the contagious disease, but from all others of

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Little place is very [illegible]

[illegible] the general description of appearances may [illegible] the case [illegible] in an [illegible]

[illegible] to the [illegible]

[illegible] 22.

The [illegible] and [illegible]

[illegible] article in date 8

[illegible] to the [illegible] and constitution of the

[illegible] to be [illegible]

[illegible] from the [illegible]

A physician recommended quite the reverse in cases
like this to keep the patient down.

Here then must be some to doubt, which must
be based on a thorough knowledge of disease
and physiology &c.

During the continuance of the disease a strict adherence to antiphlogistic principles must be observed, and after the patient has been depleted as much as is consistent with its strength, he is now
may above considered namely hydrotics
Hydrotherapia both general and local, tonics and
astringents, if the system is prostrated
in strength and there is a tendency to death
from venous congestion and the blood
is in a septic state and the disease
is in its early convalescence.

"Dr Neher of Cincinnati has rendered an important service to medicine by introducing into
general use the Cascara Sagrada as a remedy in
malaria. Hitherto it has certainly disappointed, the

reprobation of most practitioners, because it has been prescribed indiscriminately in every stage of the disease. Whereas for the very reason that it is so efficacious in exciting the action of the lungs and trachea to a powerful excretion of the mucous of these [illegible] in the first stage of croup, it is certain to a dangerous precipitation when these means are indiscriminately exerted, as they are, both in the forming, and febrile stage of the disease."—

It is given in decoction half an ounce to half a pint of water reduced to four ounces by boiling and given repeatedly in small doses once as often as the exigencies of the case may demand.—

In all those unmanageable cases which resist or do not give way to the remedies already enumerated, there is reason to believe that there is an extension of the disease to the lungs, producing an effusion of coagulable lymph in the air cells. This being the case, symptoms make their appearance

[illegible] under the diagnosis between that of [illegible]
and [illegible] [illegible] Dietha, may [illegible] difficulties.
Difficulties of prediction. [illegible] of the true nature
[illegible] of the pus and [illegible] of fluids are more the
[illegible] and [illegible] is [illegible].

What is to be done? Guided by the position of Dr
Chapman which [illegible] in the [illegible] of [illegible]
[illegible] [illegible] for the [illegible] [illegible] that
[illegible] [illegible] [illegible] to [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
great. Relief is derived from the use of [illegible]
in this place — [illegible] the [illegible] and cause
[illegible], and [illegible] [illegible] the [illegible]
[illegible] are [illegible] to be well [illegible].

"In a case of [illegible] [illegible] which [illegible]
[illegible] practice of Dr Chapman's [illegible] [illegible] and
[illegible] [illegible] the [illegible] of the disease [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible], and under the [illegible] [illegible]

circumstances. The patient was a female child, about two years old: through neglect the disease had uninterruptedly run its course, and had advanced to what I have termed the third stage, marked with all the symptoms mentioned as characteristic of that stage of croup. Little or no hope being entertained of its recovery, a strong solution of the sulphate of Zinc and afterwards of Sulphate of Copper, were freely and repeatedly given, and the excitement of the system roused by blisters, a stimulating warm bath, and enemata &c.

Where from debility the lancet is entirely forbidden, Topical Bloodletting by cups may safely be had recourse to, after which a blister may be laid upon the neck or upper part of the breast. The subsequent treatment is to depend upon expectorants –

Dr Cope's Tar syrup is eminently adapted to,

this stage of the disease.
Squill alone or in combination, with calomel, (the latter article of which in small doses is an excellent expectorant) may likewise be used with great advantage.
The juice of onions or garlic may be given even to excite vomiting.
All failing as a dernier resort the operation of Bronchotomy is recommended, whether with advantage or not, I leave to the consideration of those who are more experienced.
Pennsylvania November.
1825

Jacob Lentz.